IN THE CLAIMS:

Please **AMEND** the claims as follows:

1. (Currently amended) A method of allocating queues in a network device, the method comprising:

making a classification for an incoming packet, the classification comprising at least one of an egress port number or an ingress port number;

determining whether a previously-allocated queue ~~has already been allocated~~ exists for the classification; and

allocating [[the]] a queue for the classification when [[the]] no previously-allocated queue exists ~~has not already been allocated~~ for the classification.

2. (Original) The method of claim 1, wherein the queue is associated with an ingress port of the network device.

3. (Original) The method of claim 1, wherein the queue is a virtual output queue.

4. (Currently amended) The method of claim 1, further comprising:

detecting when a previously-allocated queue is empty; and

de-allocating the empty previously-allocated queue.

5. (Original) The method of claim 1, wherein the queue is associated with an ingress port.

6. (Original) The method of claim 1, wherein the classification is based on a packet source, a packet destination or a packet priority.

7. (Currently amended) The method of claim 1, wherein the classification further comprises a [[Q]] priority number.

8. (Currently amended) The method of claim 1, wherein the determining step comprises addressing a memory that indicates whether the classification ~~has already been~~ corresponds to a previously-allocated [[a]] queue.

9. (Currently amended) The method of claim 4, further comprising updating a memory when a queue is de-allocated, wherein the memory indicates whether the classification ~~has already been~~ corresponds to the previously-allocated [[a]] queue.

10. (Currently amended) The method of claim 4, wherein the network device further comprises a free list that indicates queues available for allocation and wherein the method further comprises updating the free list when [[a]] the previously-allocated queue is de-allocated.

11. (Currently amended) A network device, comprising:

means for making a classification for an incoming packet, the classification comprising at least one of an egress port number or an ingress port number;

means for determining whether a previously-allocated queue ~~has already been allocated~~ exists for the classification; and

means for allocating [[the]] a queue for the classification when [[the]] no previously-allocated queue exists ~~has not already been allocated~~ for the classification.

12. (Original) The network device of claim 11, wherein the queue is associated with an ingress port of the network device.

13. (Original) The network device of claim 11, wherein the queue is a virtual output queue.

14. (Currently amended) The network device of claim 11, further comprising:

means for detecting when [[a]] the queue is empty; and

means for de-allocating the empty queue.

15. (Original) The network device of claim 11, wherein the queue is associated with an ingress port.

16. (Original) The network device of claim 11, wherein the classification is based on a packet source, a packet destination or a packet priority.

17. (Currently amended) The network device of claim 11, wherein the classification comprises a [[Q]] priority number.

18. (Currently amended) The network device of claim 11, wherein the determining means comprises means for addressing a memory that indicates whether the classification ~~has already been~~ corresponds to a previously-allocated [[a]] queue.

19. (Currently amended) The network device of claim 14, further comprising means for updating a memory when [[a]] the queue is de-allocated, wherein the memory indicates whether the classification ~~has already been~~ corresponds to the previously-allocated [[a]] queue..

20. (Original) The network device of claim 14, wherein the network device further comprises a free list that indicates queues available for allocation.

21. (Currently amended) The network device of claim 20, further comprising means for updating the free list when [[a]] the previously-allocated queue is de-allocated.

22. (Currently amended) A computer program embodied in a machine-readable medium, the computer program configured to control a network device to perform steps comprising:

making a classification for an incoming packet, the classification comprising at least one of an egress port number or an ingress port number;

determining whether a previously-allocated queue ~~has already been allocated~~ exists for the classification; and

allocating [[the]] a queue for the classification when [[the]] no previously-allocated queue exists ~~has not already been allocated~~ for the classification.

23. (Currently amended) A network device, comprising:

a plurality of ports configured to receive an incoming packet[[s]];

a classification engine for making a classification[[s]] for the incoming packet[[s]], the classification comprising at least one of an egress port number or an ingress port number;

a memory that indicates whether a previously-allocated queue ~~has already been allocated~~ exists for ~~a classification~~ the classification; and

a processor for allocating [[the]] a queue for the classification when [[the]] no previously-allocated queue exists ~~has not already been allocated~~ for the classification.

24. (Original) The network device of claim 23, wherein the memory is a content addressable memory.

25. (Original) The network device of claim 23, wherein the memory is a random access memory.

26. (Currently amended) A method of allocating queues in a network device, the method comprising:

~~having no queues allocated at a first time;~~

receiving a first packet;

making a first classification for the first packet, the first classification comprising at least one of a first egress port number or a first ingress port number;

allocating a first queue for the first classification;

receiving a second packet;

making a second classification for the second packet, the second classification comprising at least one of a second egress port number or a second ingress port number; and

determining whether the first classification is the same as the second classification.

27. (Currently amended) The method of claim 26, further comprising [[the]] a step of allocating a second queue, different from the first queue, when the first classification is different from the second classification.

28. (Currently amended) The method of claim 26, further comprising [[the]] a step of assigning the second packet to the first queue when the first classification is not different from the second classification.

29. (Currently amended) ~~A method of allocating queues in a network device,~~ [[t]]The method of claim 1, further comprising:

determining a first number of packets that an ingress port of the network device can receive; and

allocating a second number of physical queues for the ingress port, wherein the second number is less than or equal to the first number.

30. (Currently amended) The method of claim 29, wherein the network device operates according to [[the]] a Fibre Channel protocol and wherein the determining step is based on a number of buffer-to-buffer credits granted by the ingress port.

31. (Currently amended) The method of claim 29, further comprising:

identifying a category for each packet arriving at the ingress port;

correlating the category to an existing physical queue; and

storing packet information in the existing physical queue.

32. (Original) The method of claim 29, further comprising:

identifying a category for each packet arriving at the ingress port; and

assigning the category to a physical queue, wherein the network device allocates a new physical queue only when there is no existing physical queue for the category.

33. (Currently amended) The network device of claim 31, wherein the packet information comprises control information selected from [[the]] a list consisting of destination information, source information, priority information, payload type information and payload size information.